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reduction reactions with pyrogallol to give BH and oxidation products of pyrogallol. PhHgI was exceptional in that it gave metallic Hg instead of HgI. The reactions which were run in sealed tubes at 130° with EtOH as solvent, are described.

"Reaction of Aromatic Compounds of Tin, Lead, and Bismuth with Phenols," M. M. Koton, Leningrad State Ped Med Inst

"Zhurnal Obshchey Khimii" Vol 17, 1947, pp 1307-8

Metallo-organic compounds, phenols, and alcohol were allowed to react at 130°. Bi derivatives were most reactive, followed by Hg, Pb, and Sn. Ph-Bi and 1-C<sub>10</sub>H<sub>7</sub>OH, 3 hours, no solvent, gave 98.1% Bi; (C<sub>10</sub>H<sub>7</sub>)<sub>2</sub>Bi gave 89.11% Bi; Ph<sub>2</sub>Pb gave 28.71% Pb; Ph<sub>2</sub>Sn gave 0% Sn. With pyrogallol as the phenol and EtOH as solvent, Ph<sub>2</sub>Bi gave 92.42% Bi in 0.5 hour, 98.03% Bi in 1 hour; (C<sub>10</sub>H<sub>7</sub>)<sub>2</sub>Bi gave 17.51% Bi in 1 hour, 49.9% in 2 hours, 64.97% in 3 hours, and 70.5% in 4 hours. Ph<sub>2</sub>Pb gave 0% Pb in 3 hours and Ph<sub>2</sub>Sn 0% Sn in 5 hours. The organic reaction products were C<sub>6</sub>H<sub>6</sub> or C<sub>10</sub>H<sub>8</sub>, respectively.

"Influence of Sulfonamides on the Protozoan Fauna of Frog Intestines," I. A. Meshchorakaya-Shteynberg, Leningrad State Ped Med Inst

"Farmakol i Toksikol" Vol 9, No 4, 1946, pp 36-9

Sulfadiazine (I), sulfathiazole (II), sulfidine (III), sarafil (para-sulfonamidobenzylamine, IV), sulfanilamide (V), disulfan (VI), and acridine (VII) were toxic, in descending order as listed, to: *Opalina ranarum*, *Nictotherus*, *Nematoda spectanz aculeata*, *Gorgodera gorgoderina*, *Diplodiscus subclavatus*, and *Polystomum intermedium*. Nicotinic acid protects the intestinal protozoa. The observed changes in protozoa can be used to advantage in teaching students the effects of sulfa drugs.

"Comparison of the Antimuscarinic Effects Produced by the Optical Isomers of Camphor," A. M. Rusanov, Leningrad State Ped Med Inst

"Fiziologicheskii Zhurnal SSSR" Vol 32, 1946, pp 283-6

The antimuscarinic effects of the isomers of camphor were studied by subcutaneously injecting a frog with solutions of arecoline and carbacholine. When the activity of the heart was arrested, an aqueous solution of camphor was injected subcutaneously and the time until resumption of heart activity was measured. Contrary to other reports, this investigation showed a marked difference in the capacity of the 2 isomers to restore the cardiac activity. The d-isomer was twice as rapid in its action as the l-form,

- 2 -

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and was five times as active.

"Catalytic Decomposition of Acetals," M. M. Koton and L. I. Barsukova, Leningrad State Ped Med Inst

"Zhurnal Obshchey Khimii" Vol 16, 1946, pp 685-94

The catalytic decomposition of 3 acetals  $\sqrt{MeCH(OBu)}_2$ , isovaleraldehyde diisoamyl acetal, and  $Me-CHCH-(OCH_2CHMe)_2$  was studied over Cu, Cu-Zr, Cu-Ur, and Ni catalysts in the range 200-500°. In contrast with the behavior of alcohols, the acetals decompose in such a manner as to yield an alcohol,  $C_4H_{10}$ , and gaseous products. The olefin is formed apparently because of intermediate formation of vinyl ethers. All 3 acetals are very stable thermally in the absence of the catalysts.

"Catalytic Decomposition of Formaldehyde Dimethyl Acetal and Formaldehyde Diisoamyl Acetal," M. M. Koton and I. A. Chernov, Leningrad State Ped Med Inst

"Zhurnal Obshchey Khimii" Vol 16, 1946, pp 695-700

Methylal is readily decomposed over metallic catalysts with formation of H, CO, CO<sub>2</sub>, and CH<sub>4</sub>. Formaldehyde diisoamyl acetal was more stable and only at 350-500° (over Cu-Ur or Cu-Zr) gave appreciable amounts of olefins, H, and gaseous decomposition products.

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- 3 -

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